UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,402	11/22/2000	Glenn F. Evans	MS1-688US	2724

22801 7590 11/27/2007

LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

EXAMINER	
BOCCIO, VINCENT F	
ART UNIT	**PAPER NUMBER**
2165	

MAIL DATE	DELIVERY MODE
11/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,492	07/25/2003	Gregg E. Skow	H0003921	4206

128 7590 11/27/2007

HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER	
LOVEL, KIMBERLY M	
ART UNIT	PAPER NUMBER
2167	
MAIL DATE	DELIVERY MODE
11/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

MN

Office Action Summary	Application No.	Applicant(s)	
	10/627,492	SKOW, GREGG E.	
	Examiner	Art Unit	
	Kimberly Lovel	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29 and 37-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29 and 37-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-29 and 37-49 are rejected and claims 30-36 are cancelled.

Response to Appeal Brief

2. In view of the Appeal Brief filed on 30 August 2007, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1- 29 and 37-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,804,664 to Hartman et al (hereafter Hartman) in view of US Patent No 7,103,605 to Hazi et al (hereafter Hazi) in view of US Patent No 5,794,244 to Brosch et al (hereafter Brosch).

Referring to claim 1, Hartman discloses a program product, comprising:

a) a database that is compatible with multiple end-user systems (see column 4, lines 51-67), the database comprising:

a data section that includes a plurality of data records [records] (see column 4, lines 35-54); and

b) at least one physical computer-readable medium having said database stored thereon (see column 4, lines 29-34).

While Hartman et al teaches at least a feature mask [bit mask], the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems (see column 8, lines 54-60 and column 9, line 44 – column 10, line 28 – the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; the query profile can represent the user profile; compatibility is depicted by the bit being set to a 0

or a 1), Hartman fails to explicitly disclose a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more end-user systems. Hazi discloses a database containing a plurality of data records containing a plurality of attributes (see abstract), including the further limitation of a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more end-user systems [derivative processors 254] (see column 3, lines 14-21; column 4, lines 5-12 and lines 47-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Hazi's concept of a structure section as a component of Hartman's database in order to store the bit mask of Hartman. One would have been motivated to do so to increase the efficiency of retrieving query results since it is well known in the art that an indexed data set decreases data lookup time.

While the combination of Hartman and Hazi (hereafter Hartman/Hazi) teaches a feature mask for determining which data records are available to a user, Hartman/Hazi fails to explicitly disclose the further limitation of the feature mask including data that indicates whether a particular one of the data records is compatible with the one or more of the end-user systems. Brosch discloses identifying eligible types of devices present in one or more data storage libraries (see column 5, lines 37-40), including the further limitation of the feature mask including data that indicates whether a particular one of the data records is compatible with the one or more of the end-user systems (see column 6, line 38 – column 7, line 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize Brosch's concept of a feature mask being utilized to determine compatibility with Hartman/Hazi's concept of using a feature mask to determine if a record is available to a end-user system. One would have been motivated to do so in order to increase the feasibility of determining compatibility.

Referring to claim 2, the combination of Hartman/Hazi and Brosch (hereafter Hartman/Hazi/Brosch) discloses the program product of claim 1, wherein:

each data record has one or more features [attributes] associated therewith (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13); and

the feature mask data indicates whether each feature of a data record is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50).

Referring to claim 3, Hartman/Hazi/Brosch discloses the program product of claim 2, wherein:

each data record includes at least a feature field containing one or more feature bits that represent each of the features associated therewith (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13; column 11, line 57 – column 12, line 3; and column 12, lines 42-50); and

the feature mask includes one or more feature mask records, each feature mask record including at least one or more compatibility fields each containing one or more

bits that indicate whether a particular one of the data records is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50; column 11, line 57 – column 12, line 3; and column 12, lines 42-50; and Brosch: see column 6, line 38 – column 7, line 6).

Referring to claim 4, Hartman/Hazi/Brosch discloses the program product of claim 1, wherein:

the data section comprises a plurality of data tables, each data table including a plurality of the data records (Hazi: see column 8, lines 11-22); and

the structure section comprises a plurality of features masks, each feature mask at least associated with one of the data tables and including data that indicates whether a particular one of the data records in an associated data table is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; Hazi: see column 3, lines 14-21 – plurality of bit vector indices).

Referring to claim 5, Hartman/Hazi/Brosch discloses the program product of claim 4, wherein:

each data record in each data table includes at least a feature field containing one or more feature bits that represent each of the features associated therewith (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13; column 11, line 57 – column 12, line 3; and column 12, lines 42-50);

and each feature mask includes a plurality of feature mask records, each feature mask record including at least one or more feature mask values that indicate whether a particular one of the data records in the associated data table is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50; column 11, line 57 – column 12, line 3; and column 12, lines 42-50; and Brosch: see column 6, line 38 – column 7, line 6).

Referring to claim 6, Hartman/Hazi/Brosch discloses the program product of claim 1, wherein the structure section further comprises a system identification table that includes data that uniquely identifies each of the end-user systems (Hartman et al: see column 6, lines 25-38 and column 7, lines 16-26 – the user profile and client profile databases are considered to represent the information that *uniquely identifies each of the end-user systems*).

Referring to claim 7, Hartman/Hazi/Brosch discloses the program product of claim 6, wherein the system identification table comprises a plurality of system identification records, each system identification record associated with each of the end-user systems (Hartman et al: see column 6, lines 25-38 and column 7, lines 16-26 – the user profile and client profile databases are considered to represent the information that *uniquely identifies each of the end-user systems*).

Referring to claim 8, Hartman/Hazi/Brosch discloses the program product of claim 1, wherein:

the data section comprises a plurality of data tables, each data table including a plurality of the data records (Hazi: see column 8, lines 11-22); and

the structure section further comprises a table pointer table that includes data that uniquely describes at least each of the data tables (Hartman et al: see column 7, lines 37-43; Hazi: see column 3, lines 14-21).

Referring to claim 9, Hartman/Hazi/Brosch discloses the program product of claim 8, wherein: the table pointer table comprises a plurality of table pointer records; and at least one table pointer record is associated with each of the data tables (Hartman et al: see column 7, lines 37-48).

Referring to claim 10, Hartman/Hazi/Brosch discloses the program product of claim 9, wherein each table pointer record includes data representative of at least: a location of the associated data table (Hartman: see column 7, lines 13-15); a number of the data records in the associated table; and a size of each data record in the associated data table.

Referring to claim 11, Hartman/Hazi/Brosch discloses the program product of claim 1, wherein:

each data record includes one or more fields (Hazi: see column 3, lines 7-12); and

the structure section further comprises a field definition table that includes at least data representative of each of the data record fields (Hazi: see column 8, lines 11-23).

Referring to claim 12, Hartman/Hazi/Brosch discloses the program product of claim 11, wherein the structure section further comprises one or more return type tables, each return type table including data representative of a format of each of the data record fields (Hartman et al: see column 4, lines 35-39).

Referring to claim 13, Hartman/Hazi/Brosch discloses the program product of claim 1, further comprising: a header section that includes data representative of indicia that is used to identify the database (Hartman et al: see column 4, lines 47-54).

Referring to claim 14, Hartman/Hazi/Brosch discloses the program product of claim 13, wherein the header section further includes data representative of a location of the structure section (Hartman et al: see column 4, lines 35-54).

Referring to claim 15, Hartman discloses a method of generating a database that is compatible with multiple end-user systems, the method comprising the steps of:

generating a data section (see column 4, lines 35-54); and

storing a plurality of data records in the data section (see column 4, lines 35-54).

While Hartman et al teaches generating a feature mask, the feature mask [bit mask], the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems (see column 8, lines 54-60 and column 9, line 44 – column 10, line 28 – the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; the query profile can represent the user profile; compatibility is depicted by the bit being set to a 0 or a 1), Hartman fails to explicitly disclose a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more end-user systems. Hazi discloses a database containing a plurality of data records containing a plurality of attributes (see abstract), including the further limitation of a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more end-user systems [derivative processors 254] (see column 3, lines 14-21; column 4, lines 5-12 and lines 47-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Hazi's concept of a structure section as a component of Hartman's database in order to store the bit mask of Hartman. One would have been motivated to do so to increase the efficiency of retrieving query results since it is well known in the art that an indexed data set decreases data lookup time.

While the combination of Hartman and Hazi (hereafter Hartman/Hazi) teaches a feature mask for determining which data records are available to a user, Hartman/Hazi

fails to explicitly disclose the further limitation of the feature mask including data that indicates whether a particular one of the data records is compatible with the one or more of the end-user systems. Brosch discloses identifying eligible types of devices present in one or more data storage libraries (see column 5, lines 37-40), including the further limitation of the feature mask including data that indicates whether a particular one of the data records is compatible with the one or more of the end-user systems (see column 6, line 38 – column 7, line 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize Brosch's concept of a feature mask being utilized to determine compatibility with Hartman/Hazi's concept of using a feature mask to determine if a record is available to a end-user system. One would have been motivated to do so in order to increase the feasibility of determining compatibility.

Referring to claim 16, Hartman/Hazi/Brosch discloses the method of claim 15, further comprising:

associating one or more features [attributes] with each data record (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13); and

wherein, the feature mask data indicates whether each feature of a data record is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50).

Referring to claim 17, Hartman/Hazi/Brosch discloses the method claim 16 further comprising:

including at least a feature field in each data record (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13; column 11, line 57 – column 12, line 3; and column 12, lines 42-50);

supplying each feature field with one or more feature bits that represent each of the features associated therewith (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13; column 11, line 57 – column 12, line 3; and column 12, lines 42-50); and

including one or more feature mask records in the feature mask (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50; column 11, line 57 – column 12, line 3; and column 12, lines 42-50; and Brosch: see column 6, line 38 – column 7, line 6);

supplying each feature mask record with one or more feature mask values that indicate whether a particular one of the data records is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50; column 11, line 57 – column 12,

line 3; and column 12, lines 42-50; and Brosch: see column 6, line 38 – column 7, line 6).

Referring to claim 18, Hartman/Hazi/Brosch discloses the method of claim 15, further comprising:

the data section comprises a plurality of data tables, each data table including a plurality of the data records (Hazi: see column 8, lines 11-22); and

generating a plurality of features masks that are each at least associated with one of the data tables and that each include data indicative of whether a particular one of the data records in an associated data table is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; Hazi: see column 3, lines 14-21 – plurality of bit vector indices).

Referring to claim 19, Hartman/Hazi/Brosch discloses the method of claim 18, further comprising:

including at least a feature field in each data record in each data table (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13; column 11, line 57 – column 12, line 3; and column 12, lines 42-50);

supplying each feature field with one or more feature bits that represent each of the features associated therewith (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13; column 11, line 57 – column 12, line 3; and column 12, lines 42-50);

including one or more feature mask records in the feature mask (Hartman: see column 9, line 44 – column 10, line 28; and Hazi: see column 4, lines 47-50; column 11, line 57 – column 12, line 3; and column 12, lines 42-50; and Brosch: see column 6, line 38 – column 7, line 6);

supplying each feature mask record one or more feature mask values that indicate whether a particular one of the data records in the associated data table is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50; column 11, line 57 – column 12, line 3; and column 12, lines 42-50; and Brosch: see column 6, line 38 – column 7, line 6).

Referring to claim 20, Hartman/Hazi/Brosch discloses the method of claim 15, further comprising: generating a system identification table that includes data that uniquely identifies each of the end-user systems (Hartman et al: see column 6, lines 25-38 and column 7, lines 16-26 – the user profile and client profile databases are considered to represent the information that *uniquely identifies each of the end-user systems*).

Referring to claim 21, Hartman/Hazi/Brosch discloses the method of claim 20, further comprising: including a plurality of system identification records in the system identification table, each system identification record associated with each of the end-user systems (Hartman et al: see column 6, lines 25-38 and column 7, lines 16-26 – the user profile and client profile databases are considered to represent the information that *uniquely identifies each of the end-user systems*).

Referring to claim 22, Hartman/Hazi/Brosch discloses the method of claim 15, further comprising:

dividing the data section comprises a plurality of data tables, each data table including a plurality of the data records (Hazi: see column 8, lines 11-22); and

generating a table pointer table that includes data that uniquely describes at least each of the data tables (Hartman et al: see column 7, lines 37-43; Hazi: see column 3, lines 14-21).

Referring to claim 23, Hartman/Hazi/Brosch discloses the method of claim 22 further comprising: including a plurality of table pointer records in the table pointer table, at least one table pointer record is associated with each of the data tables (Hartman et al: see column 7, lines 37-48).

Referring to claim 24, Hartman/Hazi/Brosch discloses the method of claim 23, further comprising: supplying each table pointer record with data representative of at least (i) a location of the associated data table (Hartman: see column 7, lines 13-15), (ii) a number of the data records in the associated table and (iii) a size of each data record in the associated data table.

Referring to claim 25, Hartman/Hazi/Brosch discloses the method of claim 15, further comprising:

including one or more fields in each data record (Hazi: see column 3, lines 7-12); and

generating a field definition table that includes at least data representative of each of the data record fields (Hazi: see column 8, lines 11-23).

Referring to claim 26, Hartman/Hazi/Brosch discloses the method of claim 25, further comprising: generating one or more return type tables, each return type table including data representative of a format of each of the data record fields (Hartman et al: see column 4, lines 35-39).

Referring to claim 27, Hartman/Hazi/Brosch discloses the method of claim 15, further comprising: generating a structure section and including the feature mask therein (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; Hazi: see column 3, lines 14-21 – plurality of bit vector indices); generating a header section (Hartman et al: see column 4, lines 47-54); and supplying the a header section with data representative of indicia that is used to identify the database (Hartman et al: see column 4, lines 47-54).

Referring to claim 28, Hartman/Hazi/Brosch discloses the method of claim 27, wherein the header section further includes data representative of a location of the structure section (Hartman et al: see column 4, lines 35-54).

Referring to claim 29, Hartman/Hazi/Brosch discloses the method of claim 15, further comprising:

including at least a feature field in each data record in each data table (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13; column 11, line 57 – column 12, line 3; and column 12, lines 42-50);

supplying each feature field with one or more features associated with each data record (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13; column 11, line 57 – column 12, line 3; and column 12, lines 42-50);

wherein the feature field of the data record having the requested data is compared with at least a portion of the feature mask to determine whether a particular one of the data records in the associated data table is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50; column 11, line 57 – column 12, line 3; and column 12, lines 42-50; and Brosch: see column 6, line 38 – column 7, line 6).

Referring to claim 37, Hartman discloses a computer system, comprising:

a processor (see Fig 1);

memory operable in communication with the processor (see Fig 1);

a database that is compatible with multiple end-user systems (see column 4, lines 51-67), the database comprising:

a data section that includes a plurality of data records [records] (see column 4, lines 35-54).

While Hartman et al teaches at least a feature mask [bit mask], the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems (see column 8, lines 54-60 and column 9, line 44 – column 10, line 28 – the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; the query profile can represent the user profile; compatibility is depicted by the bit being set to a 0 or a 1), Hartman fails to explicitly disclose a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more end-user systems. Hazi discloses a database containing a plurality of data records containing a plurality of attributes (see abstract), including the further limitation of a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more end-user systems [derivative processors 254] (see column 3, lines 14-21; column 4, lines 5-12 and lines 47-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Hazi's concept of a structure section as a component of Hartman's database in order to store the bit mask of Hartman. One would have been motivated to do so to increase the efficiency of retrieving query results since it is well known in the art that an indexed data set decreases data lookup time.

While the combination of Hartman and Hazi (hereafter Hartman/Hazi) teaches a feature mask for determining which data records are available to a user, Hartman/Hazi fails to explicitly disclose the further limitation of the feature mask including data that indicates whether a particular one of the data records is compatible with the one or more of the end-user systems. Brosch discloses identifying eligible types of devices present in one or more data storage libraries (see column 5, lines 37-40), including the further limitation of the feature mask including data that indicates whether a particular one of the data records is compatible with the one or more of the end-user systems (see column 6, line 38 – column 7, line 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize Brosch's concept of a feature mask being utilized to determine compatibility with Hartman/Hazi's concept of using a feature mask to determine if a record is available to a end-user system. One would have been motivated to do so in order to increase the feasibility of determining compatibility.

Referring to claim 38, Hartman/Hazi/Brosch discloses the system of claim 37, wherein:

each data record has one or more features [attributes] associated therewith (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13); and

the feature mask data indicates whether each feature of a data record is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit

mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50).

Referring to claim 39, Hartman/Hazi/Brosch discloses the system of claim 37, wherein:

each data record includes at least a feature field containing one or more feature bits that represent each of the features associated therewith (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13; column 11, line 57 – column 12, line 3; and column 12, lines 42-50); and

the feature mask includes one or more feature mask records, each feature mask record including at least one or more compatibility fields each containing one or more bits that indicate whether a particular one of the data records is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50; column 11, line 57 – column 12, line 3; and column 12, lines 42-50; and Brosch: see column 6, line 38 – column 7, line 6).

Referring to claim 40, Hartman/Hazi/Brosch discloses the system of claim 37, wherein:

the data section comprises a plurality of data tables, each data table including a plurality of the data records (Hazi: see column 8, lines 11-22); and

the structure section comprises a plurality of features masks, each feature mask at least associated with one of the data tables and including data that indicates whether a particular one of the data records in an associated data table is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; Hazi: see column 3, lines 14-21 – plurality of bit vector indices).

Referring to claim 41, Hartman/Hazi/Brosch discloses the system of claim 40, wherein:

each data record in each data table includes at least a feature field containing one or more feature bits that represent each of the features associated therewith (Hartman: see column 5, lines 3-14; and Hazi: see column 3, lines 7-13; column 11, line 57 – column 12, line 3; and column 12, lines 42-50);

and each feature mask includes a plurality of feature mask records, each feature mask record including at least one or more feature mask values that indicate whether a particular one of the data records in the associated data table is compatible with one or more of the end-user systems (Hartman: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; and Hazi: see column 4, lines 47-50; column 11, line 57 –

column 12, line 3; and column 12, lines 42-50; and Brosch: see column 6, line 38 – column 7, line 6).

Referring to claim 42, Hartman/Hazi/Brosch discloses the system of claim 42, wherein the structure section further comprises a system identification table that includes data that uniquely identifies each of the end-user systems (Hartman et al: see column 6, lines 25-38 and column 7, lines 16-26 – the user profile and client profile databases are considered to represent the information that *uniquely identifies each of the end-user systems*).

Referring to claim 43, Hartman/Hazi/Brosch discloses the system of claim 42, wherein the system identification table comprises a plurality of system identification records, each system identification record associated with each of the end-user systems (Hartman et al: see column 6, lines 25-38 and column 7, lines 16-26 – the user profile and client profile databases are considered to represent the information that *uniquely identifies each of the end-user systems*).

Referring to claim 44, Hartman/Hazi/Brosch discloses the system of claim 37, wherein:

the data section comprises a plurality of data tables, each data table including a plurality of the data records (Hazi: see column 8, lines 11-22); and

the structure section further comprises a table pointer table that includes data that uniquely describes at least each of the data tables (Hartman et al: see column 7, lines 37-43; Hazi: see column 3, lines 14-21).

Referring to claim 45, Hartman/Hazi/Brosch discloses the system of claim 45, wherein: the table pointer table comprises a plurality of table pointer records; and at least one table pointer record is associated with each of the data tables (Hartman et al: see column 7, lines 37-48).

Referring to claim 46, Hartman/Hazi/Brosch discloses the system of claim 45, wherein each table pointer record includes data representative of at least: a location of the associated data table (Hartman: see column 7, lines 13-15); a number of the data records in the associated table; and a size of each data record in the associated data table.

Referring to claim 47, Hartman/Hazi/Brosch discloses the system of claim 37, wherein:

each data record includes one or more fields (Hazi: see column 3, lines 7-12); and

the structure section further comprises a field definition table that includes at least data representative of each of the data record fields (Hazi: see column 8, lines 11-23).

Referring to claim 48, Hartman/Hazi/Brosch discloses the system of claim 47, wherein the structure section further comprises one or more return type tables, each return type table including data representative of a format of each of the data record fields (Hartman et al: see column 4, lines 35-39).

4. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,134,500 to Tang et al (hereafter Tang et al) in view of US Patent No 6,804,664 to Hartman et al in view of US Patent No 7,103,605 to Hazi et al in view of US Patent No 5,794,244 to Brosch et al.

Referring to claim 49, Tang et al disclose a flight management system (see abstract), comprising:

Memory [mainframe] (see column 8, lines 23-46);

a navigation database [navigation database] stored in the memory, the navigation database compatible with multiple flight management systems (see column 4, lines 33-63) and including:

a processor configured to generate an aircraft flight plan based at least in part on the navigational data stored in the navigation database (see column 7, lines 14-31).

However, Tang et al fail to explicitly disclose the further limitation, wherein the database includes a data section that includes a plurality of navigational data records, and a structure section that includes a feature mask, the feature mask including data that indicates whether a particular one of the navigational data records is compatible with one or more of the flight management systems. Hartman et al discloses a navigational database [geographic data database 143], including the further limitation wherein a data section that includes a plurality of navigational data records (see column 6, line 59 – column 7, line 3), and a structure section that includes a feature mask, the feature mask including data that indicates whether a particular one of the navigational

data records is compatible with one or more of the flight management systems (see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the feature of feature masking in a navigation database as disclosed by Hartman et al with the navigation database of Tang et al. One would have been motivated to do so in order provide customized flight plans.

While the combination of Tang and Hartman (hereafter Tang/Hartman) teaches at least a feature mask [bit mask], the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems (see column 8, lines 54-60 and column 9, line 44 – column 10, line 28 – the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible; the query profile can represent the user profile; compatibility is depicted by the bit being set to a 0 or a 1), Hartman fails to explicitly disclose a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more end-user systems. Hazi discloses a database containing a plurality of data records containing a plurality of attributes (see abstract), including the further limitation of a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is

compatible with one or more end-user systems [derivative processors 254] (see column 3, lines 14-21; column 4, lines 5-12 and lines 47-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Hazi's concept of a structure section as a component of Hartman's database in order to store the bit mask of Tang/Hartman. One would have been motivated to do so to increase the efficiency of retrieving query results since it is well known in the art that an indexed data set decreases data lookup time.

While the combination of Tart/Hartman and Hazi (hereafter Tart/Hartman/Hazi) teaches a feature mask for determining which data records are available to a user, Tart/Hartman/Hazi fails to explicitly disclose the further limitation of the feature mask including data that indicates whether a particular one of the data records is compatible with the one or more of the end-user systems. Brosch discloses identifying eligible types of devices present in one or more data storage libraries (see column 5, lines 37-40), including the further limitation of the feature mask including data that indicates whether a particular one of the data records is compatible with the one or more of the end-user systems (see column 6, line 38 – column 7, line 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize Brosch's concept of a feature mask being utilized to determine compatibility with Tart/Hartman/Hazi's concept of using a feature mask to determine if a record is available to a end-user system. One would have been motivated to do so in order to increase the feasibility of determining compatibility.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Lovel whose telephone number is (571) 272-2750. The examiner can normally be reached on 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly Lovel
Examiner
Art Unit 2167

21 November 2007
kml

JOHN COTTINGHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100